Mooncell

MB4 Asynchronous Controller

Specification V4.5

1 Product Overview

Product Introduction

MB4 Media Player features high performance 8 Core CPU and it's a combination of the Player with the Sending Card(Integration). Given that the Player has a very high performance of the video processing.MB4 is quite small in size and low in power consumption and is suitable for a wide temperature range with easy installation and handy maintenance. MB4 supports 2 network outputs, the maximum loading capacity could reach up to 1.3 million pixels, widest:3840/highest 2160.

Product Features

➢ it supports the switching between synchronous and asynchronous.

➢ it supports HDMI Loop Out

➢ it supports H.265 Hard Decoding.

➢ it supports cloud cluster control management.

➢ Android 7.1 supported.

➢ Mobiles,IPad,LAN,PC are supported to control the programs & the led screens.

➢ WIFI Connection & WIFI Hotpot Connection are supported.

➢ Low Power Consumption, Low Heat Radiation, Stable & Reliable

Performance and is suitable for wide temperature range.

➢ **Small Size & Light Weight with Easy Installation & Convenient Maintenance.**

Application Scenarios

It could be widely used at business display area(fields) such as : Fixed Installation LED Display, Intelligent Lamppost Led Display, Over-door Led Display,Vehicle-Mounted Led Display, Chain Stores Cluster Display Management, Led Electronic Whiteboard, Led Mirror(Mirror-like Led Display),Advertise Led Display, and the Led Display that does not need to be used with the PC(Offline Mode).

2 Function Introduction

➢ **It supports HD videos,Pictures(Images),TXT,Weather Info,Clock and a variety of programs.**

➢ **It supports to have the multiple windows, the size & position of the windows could be set as you wish and the window overlay is supported.**

➢ **LAN,WIFI,4G,etc.are supported.**

➢ **Applications for Android and IOS are available.**

➢ **PC, Mobile Phones and Pad are supported to be used to control and manage with the programs and its parameters.**

➢ **The RS485 Sensor Interface could be supported to monitor the temperature,humidity,lightness and some other environmental situations (parameters).**

➢ **The brightness of the led display could be automatically adjusted.**

➢ **Using the Network Time Protocol (NTP) to synchronize the Time (To get the accurate Time).**

➢ **It supports to have multiple displays to work simultaneously (synchronized).**

➢ **It supports Monitor HDMI output so that it could be used as the Monitor output, or it could be also used for LED+LCD combined**

Networks.

➢ **It supports to use the USB Flash disk to update the programs, plug and play, you can also use the Ethernet to update and manage with the programs.**

➢ **It supports to automatically adjust the brightness or set the schedule to have the brightness automatically adjusted.**

➢ **It supports to play the programs as in "player list" orders.**

➢ **Through the Management System,you can have a cluster of settings for it's On/Off at a certain time.(Timer).**

➢ **It supports synchronous and asynchronous switching.**

➢ **It supports HDMI Input and HDMI Loop Output.**

➢ **it supports H.265 Hard Decoding. High Definition Hard Decoding Play.**

➢ **it supports cloud cluster control management. You don't have to be on site to configure you screen.**

Audio & Video Performance:

Programs Partition	The Programs Windows could be partitioned as you wish,and the same with the superposed windows.
Video Format	AVI,WMV,MPG,RM/RMVB,MOV,DAT,VOB,MP4,FLV,etc.
Audio Format	MPEG-1 Layer III，AAC,etc.
Image	BMP、JPG、PNG,etc.

Format	
TXT Format	TXT,RTF,WORD,etc.
TXT Display	Single-Line TXT,Static TXT,Multi-Line TXT
Image Partition	It supports Video,Image,Scrolling Caption,LOGO,Data and Time; the images could be partitioned as you wish.
OSD Supported	It supports 32bit True Color OSD,it could be displayed at any position, it supports the video ,image and TXT to be played together at the same time, the image or TXT could be superposed on the videos, it supports transparent,semi-transparent,opaque effects.
RTC(Real Time Clock)	Real Time Clock Display and Management

Terminal Management:

Network Communication	LAN/WIFI/4G
Programs Update	USB Flash Disk Plug and Play,Terminal Ethernet Management
Device Management	PC,Android,IOS and some other Smart Terminal Devices
Wireless Control	Brightness Real Time Adjustment,On/Off Display,System Parameters Settings,Programs Play Management,Wireless Sending the Programs
Brightness Automatically Adjustment	The brightness could be automatically adjusted based on the real time environmental situations or the set schedules.

Fixed(Set) Time Playing/Timing Playing	To play the programs as in "player list"orders.
Timing Switch On/Off	Through the Management System to get the centralized setting.
Management Software	The Application is supported to be used on any Android or IOS devices.

3 Product Parameters

Basic Parameters

Performance Parameters	Processor:8 Core CPU
	Memory:2G DDR3
	Flash Memory: 8G EMMC
	Resolution: H.265 Hard Decode Playing
Network Accesses	LAN,WIFI AP,STATION,4G Module
Processing Performance	The Network Port Loads1.3 Million Pixels
	The Maximum Length:3840 Pixels
	The Maximum Height:2160 Pixels
Receiving Card Supported	Mooncell Receiving Cards

Hardware Introduction

Front Panel

Interface Name	Interface Introduction
DC 12V	Power Input Interface:5.5*2.5MM
CONFIG	Type B USB port to set display parameters
LED Indicator	PWR/4G/SYS/WIFI indicators
Micro-B	Micro-B debugging interface
4G	4G antenna interface (4G antenna interface when optional 4G module is equipped)
WiFi	WiFi antenna interface

SENSOR	Light sensor interface
SWITCH	Asynchronous playback switching
SIM	Micro SIM card, 4G cell phone card

Backside Panel

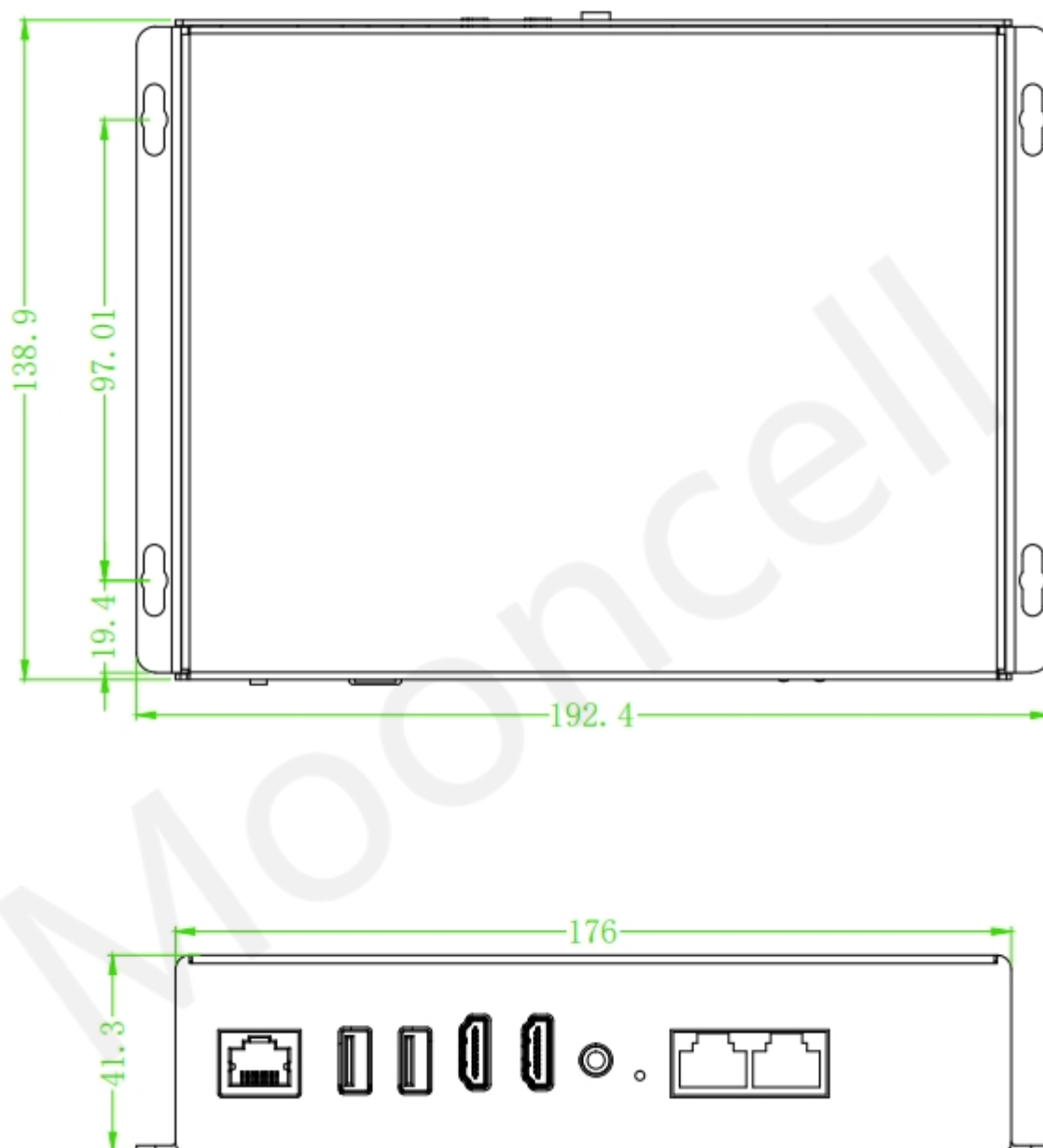| Name	Illustration
LAN	100 megabit network access network
USB	USB2.0 * 2, can be connected to external U disk storage or other devices
HDMI IN	HDMI signal input
HDMI OUT	HDMI signal output
AUDIO	1/8″ (3.5mm) TRS plug audio output
RESET	Insert the pen tip into the RESET hole, press and hold for 8 seconds to restore factory settings
LEDOUT	2 Gigabit Ethernet port output signal

Indicator Introduction:

Name	Indicator Specifications
4G	4G Indicator,While the 4G is connected,the 4G indicator will be long lasing on.
WIFI	WIFI Indicator,While the WIFI is connected, the WIFI indicator will be long lasting on.
PWR	Power Indicator, while the power is on, the indicator goes long lasing on.
SYS	System Indicator,while the system is properly running, the indicator goes flashing.

Dimensions:

Unit:mm

138.9

97.01

19.4

192.4

176

41.3

4 Product Specifications

Specifications

Electric Parameters	Input Voltage	12V
	Rated Power	15W
Operating Environment	Operating Temperature	-20℃ - 70℃
	Operating Humidity	10%RH-90%RH No Solidification
Dimensions	193mmX139mmX42mm	
Net Weight	0.5Kg	
Packaging Info	Standard List	USB Cable、Wi-Fi Antenna 2x、12V/2A Power Adapter (5.5mm×2.5mm Standard Interface)
	Optional List	4G Module

Precautions

1. **The installation should be done by the professionals.**

2. **It has to be anti static.**

3. **Water proof and dust proof.**